Installation and User Manual

Professional Remote Control Switch for Extractors with a DoL Motor Starter

Installation Instructions

Step 1 - Ensure dust extractor is isolated from the mains supply. Use test equipment to verify.

Step 2 - Mount the remote control unit:

- Remove the front cover.
- Screw to a suitable surface.

Step 3 - Fit the control cable:

- Unscrew the DoL starter cover.
- Identifying a suitable position for the remote control cable gland.
- Drill hole, insert gland and tighten in position.
- Strip sufficient outer sheath from the control cable and thread through gland.

Step 4 - Wire up the control cable:

- Connect cable 1 (live in) to a permanent live supply, fused at a max of 16A.
- Connect cable 2 (neutral in) to a suitable neutral.
- Connect cables 3 and 4 in **parallel** accross the START button N/O switch terminals.
- Connect cables 5 and 6 in **series** to the STOP button N/C terminals. This will require a wire to be removed from a terminal on the STOP button and connected directly to wire 5, whilst wire 6 is connected to the terminal from which it was removed. It does not matter which side of the STOP switch this occurs.
- Check all new connections.
- Replace the DoL starter and remove control covers.

Step 5 - Test:

- Turn on the power to the extractor.
- Ensure that STOP button on the remote unit is twisted into the on position (it locks off when pressed).
- Test that the extractor DoL starter START and STOP buttons operate normally.
- Turn the extractor on and press the STOP button on the remote unit to check that it stops the extractor. Untwist to unlock.
- Press the ON and OFF buttons on the remote control fob to check that they operate the extractor. Repeat for any additional fobs or switches.
- Buttons on the extractor DoL starter, remote control unit and remote control fob can be pressed in any order.

Pairing Additional Remotes

- Within the remote control enclosure is a small black box on the far right, with a single button.
- With power connected to the unit, press the button on the black box once. The indicator will flash once and then remain on.
- Press the module pairing button firmly once. The indicator will flash once and then remain on.
- Press the ON button on the remote. When the ON button has been sucesfully paired the indicator will flash 3 times, remaining continually on after the third flash.
- Press the OFF button on the remote. When the OFF button has been sucesfully paired the indicator will flash 3 times, turning off after the third flash.
- To completely clear all paired remotes, press the button 8 times.
- The unit will only operate with remotes which have a separate ON and OFF button; single button remotes are not compatible.

Pairing button and indicator

Adjusting or Removing the Off Delay

- The unit is supplied with a 10 second off delay. This means that when the OFF button is pressed on any remote, the extractor will run for a further 10 seconds from this time.
- The purpose of an extractor off delay is to ensure that the ducting at the furthest point is clear before it shuts down.
- The delay can adjusted to between 0.1 seconds and 3 hours using the dials on the timer.
- With the power disconnected, use a small screw driver to adjust the dials to acheive the required off delay.
- The bottom dial selects the function of the timer, and is supplied set at D (delay off).
- The top dial selects the maxium time.
- The middle dial allows finer adjusted of the time, by selected the percentage of the top time applied. 1=10%, 5=50% e.g.:
  - o To select 10 seconds, turn the top dial to 10s and the middle to 10.
  - o To select 30 seconds, turn the top dial to 1m and the middle to 5 e.g. it operates at 50% of the selected 1m.
  - o To select the shortest possible delay of just 0.1 seconds turn the top dial to 1s and the middle to 1.

- If an off delay is not required and even 0.1 seconds is too long, the delay can be removed completely by turning the bottom dial to B. With this function you must also select 1s on the top dial and 5 on the middle dial. The time set in the B function is the length of the off pulse sent to the DoL starter, not the off delay. Failure to adjust the time when using function B may result in an excessively long off pulse, preventing the extractor from being started until the end of the pulse.

 ← Time period

← Percentage of time period applied

← Timer function. D for time delay, B for no delay

Operating Instructions

- Pressing the START button on the DoL starter will still start the extractor. With the remote unit installed, pressing the ON button on any of the remotes sends a 0.5 second ON pulse to the DoL starter, to minic manually pressing the START button.
- Pressing the STOP button on the DoL starter will continue to stop the extractor. Pressing the OFF button on any of the remotes sends a 0.5 second OFF pulse to the DoL starter, to minic manually pressing the STOP button.
- In addition, the red STOP button on the remote control unit also stops the extractor. Note that red button locks in the off position when pressed and must be twisted to release it before the extractor will start again.
- The buttons on the DoL starter and remotes can be pressed in any order to control the extractor.
- Ensure that the extractor is isolated at the mains before services etc, as it may start at any time through the remote control fobs.

Wiring Diagram

1. Permanent live supply (fused at 16A max)

2. Neutral

Wires 3 and 4 connected in parallel to the start switch terminals

In series with the stop switch. Disconnect wire from switch and join to wire 5. Wire 6 to the stop switch terminal.

TOUGH LEADS

| L1 | N | L2 | L3 |

2 A1
1 A2

| L1 | L2 | L3 | 13 |

CONTACTOR

| T1 | T2 | T3 | 14 |

START **3** **4**

OVERLOAD 95

96

| T1 | T2 | T3 |

M

STOP **6** **5**